

E2
cancel
earlier rotational movement of the rotor is prevented, therefore the rotor 7 moves axially until the poles of the segments 8, 9 are appropriately aligned with the opposing magnetisation of the pole pieces 2 as shown in Figure 4c. If an alternating current is applied to the coils 5, 6 so that the magnetisation of the pole pieces 2 varies with time an alternating axial force/motion is achieved. Figures 4d to 4f shown the motion of the rotor 7 in response to an opposite force.--

IN THE CLAIMS

Please cancel claims 5 and 12 without prejudice.

Please amend the claims as follows:

- E3
cont.
1. (Amended Four Times) An electromechanical transducer comprising:
a stator having a plurality of coils; and
a magnetic assembly having a plurality of magnetic poles, there being flux linkage between the coils and the magnetic poles which results in a magnetic circuit;
wherein the stator and the magnetic assembly are arranged for relative linear movement and both the plurality of coils and the plurality of magnetic poles are arranged to describe a helical path about the axis of the transducer such that the magnetic circuit